

BEFORE THE

JUN 14 1993

**Federal Communications Commission**FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

WASHINGTON, D.C. 20554

In the Matter of	)	
	)	ET Docket No. 92-9
Redevelopment of Spectrum to	)	
Encourage Innovation in the Use of	)	7981
New Telecommunications Technologies	)	RM-7881
	)	RM-8004

To: The Commission

**SUPPLEMENTAL COMMENTS  
OF THE  
AMERICAN PETROLEUM INSTITUTE**

The American Petroleum Institute ("API"), by its attorneys and pursuant to the Public Notice issued by the Federal Communications Commission ("Commission" or "FCC"),<sup>1/</sup> hereby submits these Supplemental Comments in response to the Supplemental Comments filed by Alcatel Network Systems, Inc. ("Alcatel") in the Further Notice of Proposed Rule Making adopted by the Commission on August 5, 1992 in the above-styled proceeding.

**I. INTRODUCTION**

1. API filed Reply Comments in this proceeding on January 27, 1993, generally supporting the proposed channel plan for the bands above 3 GHz in the Commission's Further Notice of Proposed Rule Making. However, API expressed its

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<sup>1/</sup> Public Notice, DA 93-603, released May 28, 1993.

concern that the proposed channelization plans eliminated narrowband channels from certain frequency bands, and urged the Commission to avoid proposals eliminating their availability. Specifically, API opposed the proposed channelization plans at 4 GHz of the Telecommunications Industry Association Fixed Point-to-Point Communications Section ("TIA") and Harris Corporation Farinon Division, Digital Microwave Corporation and Telesciences, Inc. ("Joint Commenters") because they eliminate all the narrowband channels in that range.<sup>2/</sup> API urged the Commission to adopt its original proposal for the 4 GHz band which accommodated 400 kHz, 800 kHz, 1.6 MHz, 5 MHz, 10 MHz and 20 MHz channels.

2. API also stressed that there be a balanced mix of both wideband and narrowband channels which can accommodate the operating needs of both private systems and common carriers. Accordingly, API preferred the FCC/Alcatel plan over the TIA/Joint Commenters plan at 6 GHz because a wide mix of narrowband channels was proposed, namely, 400 kHz, 800 kHz, 1.6 MHz, 5 MHz, 10 MHz and 30 MHz channels. Finally, API stressed that the Commission should select a channelization plan that was generally agreed upon by a

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<sup>2/</sup> Comments of TIA and Harris at Appendix, A-1.

consensus of microwave equipment manufacturers and would promote a competitive marketplace.

3. In an effort to reach a consensus among the microwave equipment manufacturers, Alcatel has filed yet another channelization plan which proposes a 2.5 MHz-based channelization as advocated by TIA and the Joint Commenters (the "Compromise Plan"). This is a notable compromise for Alcatel. Unfortunately, Alcatel's Compromise Plan obscures the underlying issue that the Commission must address -- developing the most efficient channel plan and mitigating the relocation burdens of displaced 2 GHz Private Operational-Fixed Microwave ("POFS") and other point-to-point microwave licensees who will be forced to move to higher frequency bands. From a user's perspective, API emphasizes that the successful relocation of the microwave user community must remain the focal point of this proceeding.

## II. SUPPLEMENTAL COMMENTS

4. If POFS users are to be forced to relocate, replacement spectrum must be available that is suitable for their critical microwave operations. API supports the Commission's undertaking to rechannelize the frequency bands above 3 GHz to accommodate displaced 2 GHz users. The Commission has the task of developing a channelization plan which will smoothly and efficiently transition displaced 2 GHz users to higher frequency bands. To this point, the Commission has had before it two channelization plans primarily proposed by microwave equipment manufacturers. The Commission now has an additional channelization plan which it must consider. Unfortunately, these manufacturers appear to have focussed their attention primarily on their own equipment manufacturing concerns while appearing to disregard one of the primary issues of this proceeding: the successful relocation of existing 2 GHz microwave operations to higher frequency bands. API urges the Commission to adopt a plan which fully accommodates the spectrum needs and technical operations of displaced 2 GHz licensees. The Commission should not adopt a channelization plan which merely resolves the debate among microwave equipment manufacturers and disregards the needs of the users community.

**A. The Commission Must Adopt a Channelization Plan Which Provides Sufficient Narrowband Channels in the 4 GHz Band**

5. In the interest of preserving narrowband channels, API opposes the Compromise Plan at 4 GHz because it eliminates all narrowband channels in that range. By adopting the TIA/Joint Commenters' 2.5 MHz-based plan, Alcatel has removed all channels of 5 MHz or less at 4 GHz apparently to meet the concern of satellite manufacturers -- that a large class of new point-to-point microwave users would crowd the band.<sup>3/</sup> The Compromise Plan at 4 GHz is unacceptable for API members. API members must have sufficient narrowband channels to accommodate displaced microwave links at 2 GHz. There are over 13,000 "skinny route" stations at 2 GHz which must potentially be relocated.<sup>4/</sup> A certain percentage of these narrowband systems will need to operate at the lowest frequency band available, i.e., 4 GHz, so that longer POFS microwave paths with reliable propagation characteristics can be maintained. Therefore, API recommends that the Commission adopt a channelization plan which maintains 400 kHz, 800 kHz,

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<sup>3/</sup> Supplemental Comments of Alcatel at Attachment A, at 4.

<sup>4/</sup> Reply Comments of the Utilities Telecommunications Council at 5-6.

1.25 MHz, 2.5 MHz, 3.75 MHz, 5 MHz and 10 MHz channels at 4 GHz. Since the Compromise Plan includes these channels at 6 GHz, a similar plan should be adopted at 4 GHz.

**B. The Compromise Plan at 6 GHz Creates Needed Narrowband Channels**

6. In contrast to the 4 GHz range, the Compromise Plan would permit 400 kHz and 800 kHz narrowband channels in the 6 GHz band. These narrowband channels are needed at 6 GHz as well to replace microwave links now operating at 2 GHz. API believes that inclusion of narrowband channels at 6 GHz creates a more diverse channelization plan, and is better suited for accommodating narrowband and wideband operations. For this reason, API believes that the Compromise Plan at 6 GHz satisfies the operational needs of both POFS licensees and common carrier point-to-point microwave licensees more adequately.

7. Nevertheless, API recognizes that retention of 400 and 800 kHz channels at 6 GHz (and their inclusion at 4 GHz) in the Compromise Plan has some spectrum usage consequences. The Compromise Plan proposes to overlay the 400 and 800 kHz channels over a 1.25 MHz channel. This proposed overlay plan will inhibit access to broader band channels at 6 GHz. While API strongly urges that spectrum be available for

narrowband operations, the Commission could take a different approach by allowing narrowband users access to 1.25 MHz channels. If such access were assured on a routine basis, with no need to make any special showings, there would not be a need to include 400 kHz and 800 kHz channels in the plan. API members would like to maintain the flexibility to continue use of narrowband channels and accessibility to wideband channels. API members are willing to operate their 400 and 800 kHz systems within the wider 1.25 MHz bandwidth at 4 and 6 GHz provided there is no regulatory penalty for doing so. Assigning 400 and 800 kHz operations to the wider 1.25 MHz channels could improve the overall frequency plan by eliminating the potential for blocked channels.

### III. CONCLUSION

8. API continues to support a rechannelization plan that balances the varying interest of both common carrier and private microwave users. API urges the Commission to adopt a channelization plan for the relocation of displaced 2 GHz users into higher frequency bands that (1) is spectrum efficient and (2) provides a sufficient amount of narrowband channels at 4 GHz to accommodate displaced microwave links.

**WHEREFORE, THE PREMISES CONSIDERED,** the American Petroleum Institute urges the Commission to take action in this proceeding consistent with the views expressed herein.

Respectfully submitted,

**AMERICAN PETROLEUM INSTITUTE**

By: *Tamara Y. Davis*

Wayne V. Black  
Christine M. Gill  
Tamara Y. Davis

Keller and Heckman  
1001 G Street, N.W.  
Suite 500 West  
Washington, D.C. 20001  
(202) 434-4100

Its Attorneys

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